



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

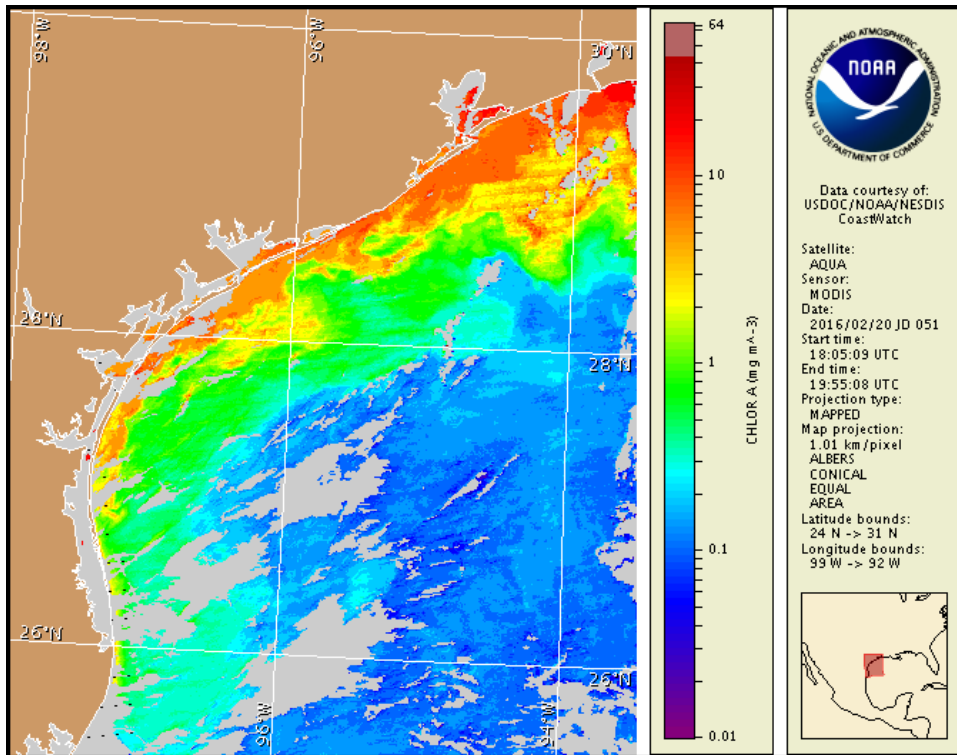
Monday, 22 February 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, February 16, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from February 12 to 19: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to background concentrations along the coast of Texas. No respiratory irritation is expected Monday, February 22 through Monday, February 29.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

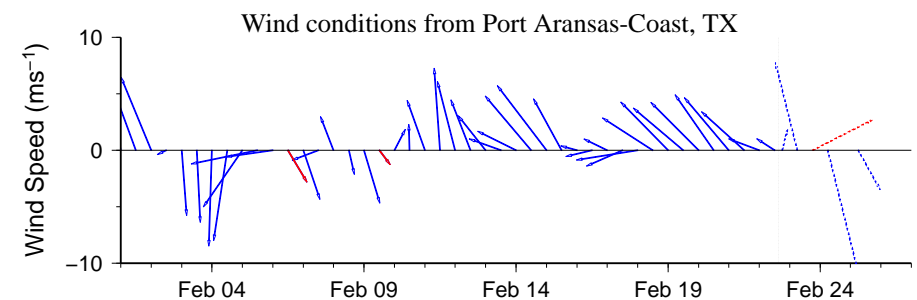
Analysis

Data from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, is currently unavailable. However, previous sampling indicated *Karenia brevis* concentrations ranging from 'not present' to 'background' (TAMU; 2/1-2/8).

In recent MODIS Aqua imagery (2/20, shown left) elevated chlorophyll (2-10 $\mu\text{g/L}$) is visible in patches from Sabine Pass to the Rio Grande. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 10 km north from the Port Aransas region from February 20-25.

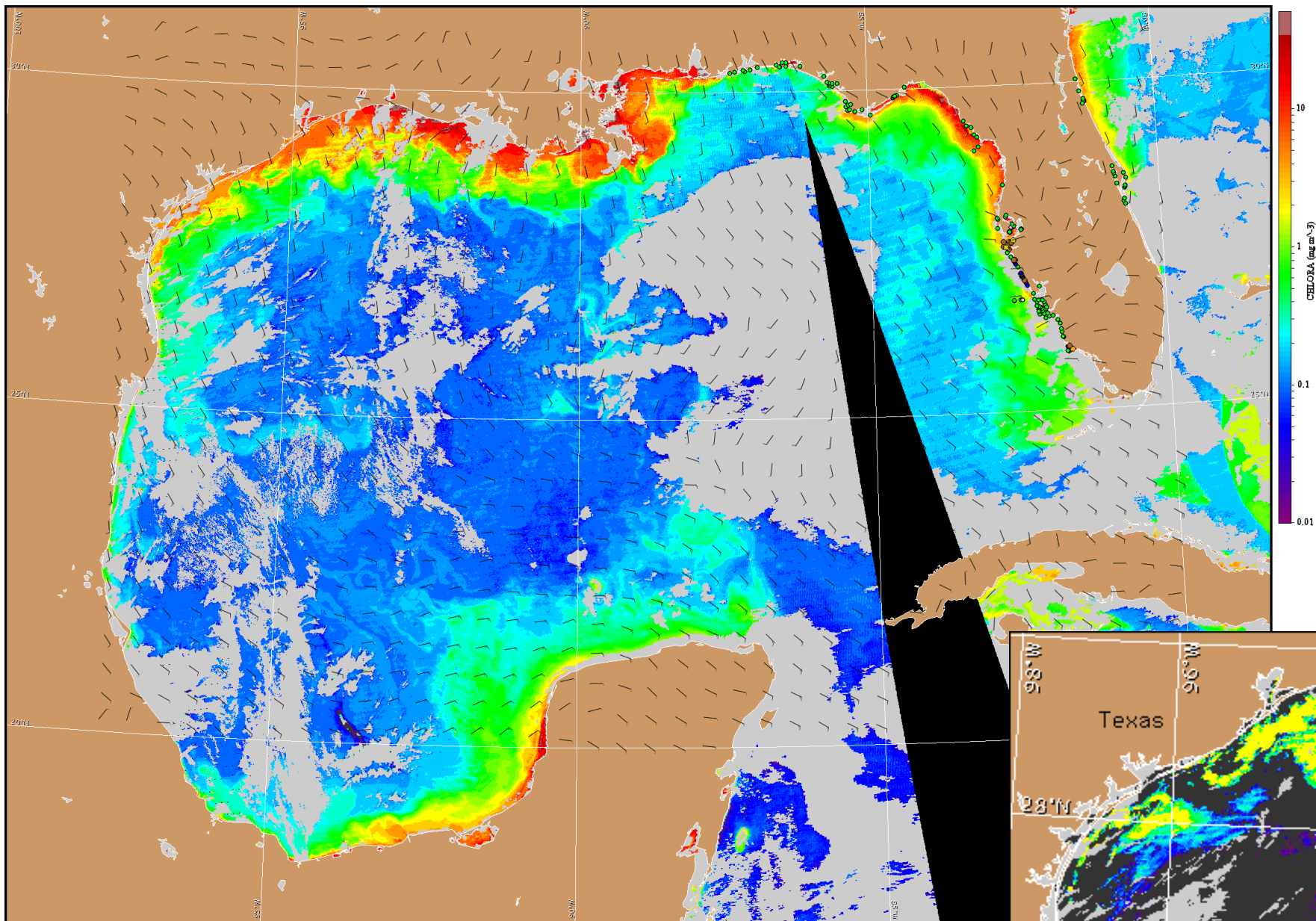
Derner, Lalime



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

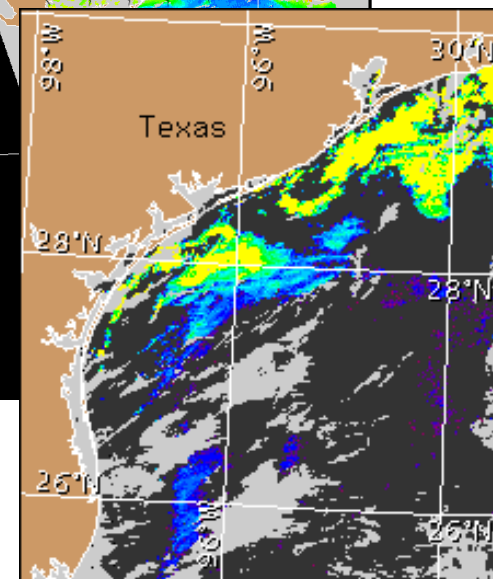
Wind Analysis

Port Aransas to Baffin Bay: South winds (5-20kn, 2-10m/s) today through Tuesday, becoming west (20-25kn, 10-13m/s) Tuesday afternoon. Northwest winds (20-45kn, 10-23m/s) Tuesday night through Wednesday. North winds (10-20kn, 5-10m/s) Wednesday night. Northwest winds (5kn, 3m/s) Thursday becoming south Thursday afternoon. East winds (5-15kn, 3-8m/s) Thursday night through Friday becoming southeast (10-15kn, 5-8m/s) Friday night.



Satellite chlorophyll image and forecast winds for February 23, 2016 06Z with points representing cell concentration sampling data from February 12 to 19: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).